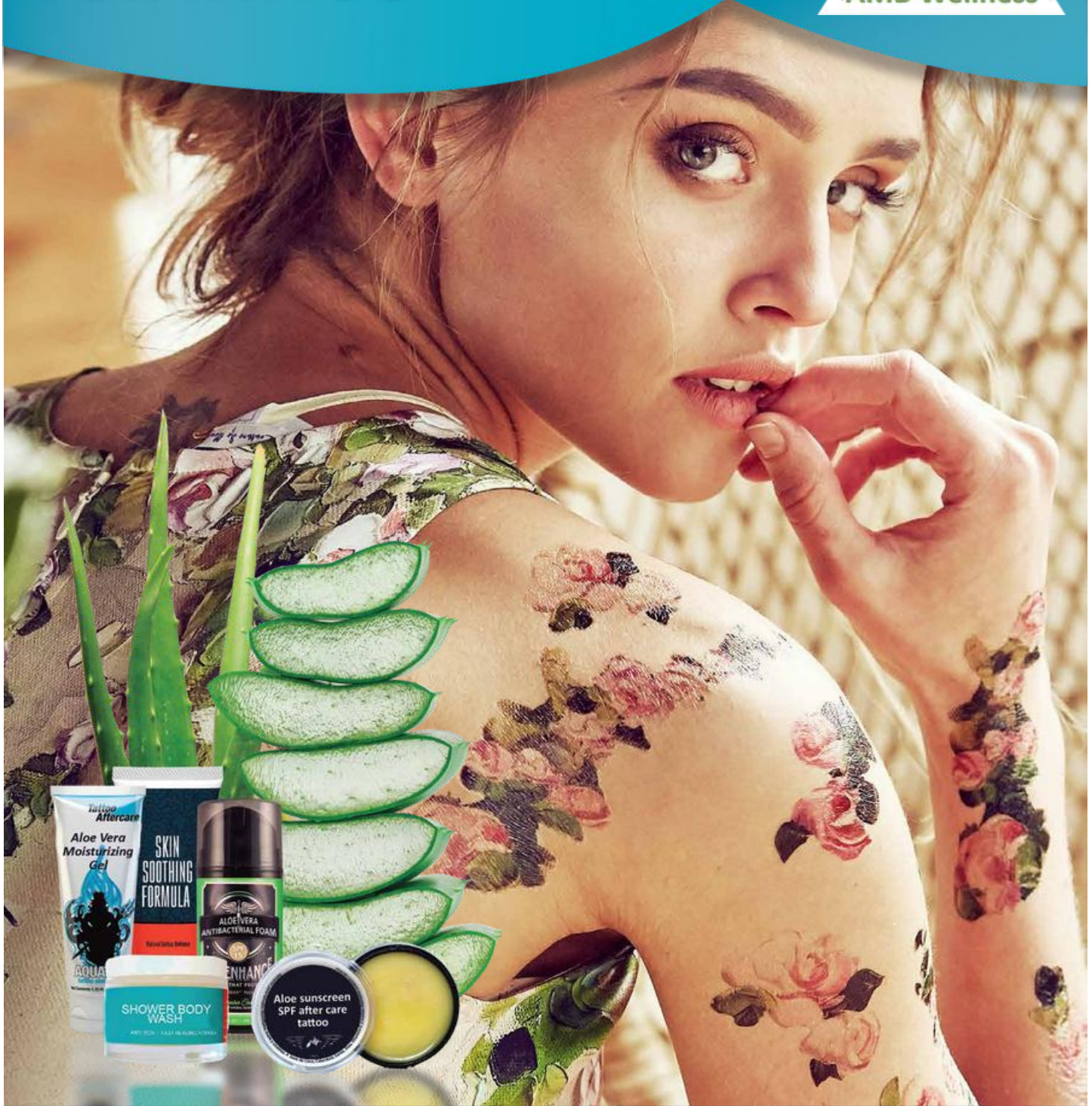


COMMERCIAL BULLETIN

ALOE VERA DERMOCARE FOR TATTOO



- Wound healing
- Faster healing moist environment

- Tattoo care
- Relieves pain and itchin

ALOE VERA: THE BEST INGREDIENT FOR YOUR TATTOO CARE PORTFOLIO

A tattoo is a form of body art that is created when ink is inserted, using a needle, into the dermis layer of the skin. This changes the skin's pigment and can be used to create almost any image imaginable. TATTOOS TODAY.

Within the last 10-20 years, the prevalence of tattoos has nearly exploded as part of an international trend. During the last 20 years, and especially during the last five to eight years, there has been a dramatic increase in the popularity of tattoos, which are in demand by all classes of society today. The nature of this phenomenon has changed dramatically and has entered the realm of normality, and has become generally accepted. Tattoos are an integral part of society, with many people sporting one or more tattoos on their body, it is certain that these tattoos can be significant for many people and cultures from around the world.

The statistics when it comes to tattoos are amazing – the industry pulls in over \$2.3 billion each year. Around 21-23% of the worldwide population, depending on the country, are inked. This stat increases to 40% of the millennial population, both men and women, have at least one tattoo. Tattoos are found on many people for various reasons, which have evolved in the recent decades. Nowadays, people are more inclined to get tattoos that have a personal meaning for them, that they consider as artistically appealing, or that they consider as a permanent decoration on their body, among other reasons.

The skin plays an important role in protection from the body internal environment and is the largest organ in the human body. Therefore, exertion of serious damage to this organ may cause several problems for the individual. Skin is composed of two layers of epidermis and dermis that are placed over the subcutaneous adipose. Currently, there are various modern skin care and treatment options that include herbal products –with Aloe Vera as a key player – that are suitable in wound healing. However, not many of these products have been marketed towards the tattoo aftercare market. Therefore, in this commercial bulletin, we propose different product concepts for tattoo aftercare that can be formulated with Aloe Vera, focusing on the appropriate healing of the wound below the tattoo.

A wound is defined as a lesion and rupture on skin surface that is caused by physical or thermal traumas, which may need some special aftercare therapy. Improvement and healing of wound in human or developed animals occur by a complex and advanced mechanism consisting on several phases including: inflammation, proliferation, healing, and reconstruction.



A tattoo is a form of permanent body art that is made by inserting ink into the layers of skin to change the pigment. The tattooing process involves the placement of pigment into the skin's dermis, the layer of connective tissue underlying the epidermis. After initial injection, pigment is dispersed throughout a homogenized damaged layer down through the epidermis and upper dermis, in both of which the presence of foreign material activates the immune system's phagocytes to engulf the pigment particles.

Professional tattoos are created by injecting tattoo inks with a rapidly reciprocating needle that drives ink particles into the dermis to a depth of 0.6 mm to 2.2 mm. The inks used in tattooing are derived from exogenous pigments. Pigments in tattoo ink can include iron oxides, chromium oxide, aluminum oxide, titanium oxide, barium sulfate, zinc oxide, sodium copper silicate, sodium aluminum silicate, copper carbonate, dioxazine and carbazole among other known pigment formulations.



Following injection of the ink pigment particles onto a region of skin, the ink pigment particles reside in the interstitial space between dermal cells where they form large aggregates of about 100 μm to 200 μm until fibroblasts or macrophages engulf the pigment particles and internalize the tattoo ink. The size of the ink particle aggregates and the collagen network surrounding the aggregates help keep the ink pigments within the skin making the tattoo permanent, thus the difficulty with removal of tattoos.



The most common method of tattooing is through use of an electric tattoo machine, which inserts ink into the skin via a group of needles that are attached to an oscillating unit. The unit rapidly and repeatedly drives the needles in and out of the skin, usually 80 to 150 times a second. A small tattoo of simple design might take fifteen minutes to complete, whereas a more elaborate design may require multiple, lengthy sessions. Any type of tattooing injures the skin, if a dye is injected into or under the skin, respectively. This may cause inflammation. It is, therefore, not only important to pay attention to special cleanliness and to use sterilized instruments, but also to use dyes having specific properties, which reduce the risk of inflammation.

An exudate can be defined as any fluid that is secreted from the blood vessels and tissues through lesions or inflamed areas of the body. Exudate is a purulent or clear fluid that oozes from wounds on the body. Exudate fluid is generally composed of cells, platelets, proteins, serum, white blood cells, red blood cells, and similar body matter or fluids. The flow of exudate away from the wound may also reduce infection. However, as the exudate dries, a crust is formed that not only depletes the moist wound healing environment but also tears away the adherent exudate from the wound. The removal of the exudative crust commonly results in secondary injury to the wound as well as ink loss in the case of tattoo wounds. The best wound covers keep the wound moist while also absorbing exudates to expedite healing of the wound. A moist wound healing environment accelerates the recovery time and also reduces the amount of scarring on the wounded tissue.

The present wound care system plays a pivotal role in hemostasis, which controls and eventually stops the blood flow. Hemostasis involves constriction of the blood vessel, temporary blockage of the blood vessel and coagulation of blood until the damaged tissue is repaired. Applying an Aloe hydrogel spread on the present wound care system may block the damaged blood vessels while also keeping the coagulated blood and exudates contained within the film layer.

Consider the development of tattoo product line as wound care system, who helps to traps moisture around the wound to promote faster healing in the moist environment, and provide an immediate evaporative cooling effect to the skin and is especially beneficial in treating burn wounds.



ALOE HEALING MECHANISM

Aloe Vera is a complex plant that contains many biologically active substances. Studies have shown that the majority of these biologically active substances are located in a clear gel fillet located in the center of Aloe leaves. Historically, Aloe products have been used in dermatological applications for the treatment of burns, sores and other wounds. This traditional use has stimulated a great deal of research on identifying compounds from Aloe plants that have clinical activity, particularly anti-inflammatory activity. Aloe Vera has a mucilage tissue (gel). This mucilage consists of some glycoproteins, which prevent against inflation and pain and accelerate their improvement trend. Likewise, it comprises polysaccharides, which stimulate skin growth and healing. The mucilage of this plant can be used for treatment of internal and external wounds. Beside the polysaccharides, these are the most beneficial Aloe components for tattoo aftercare:

Aloe Lipids

Essential oils are antiseptic, bactericidal and have the ability to act against viruses. There are no side effects and germs do not develop resistance to them. Gibberellin (a plant growth hormone) in Aloe increases wound healing by increasing protein synthesis.

The activity of gibberellin-like substances possibly plays a major role in the wound healing and anti-inflammatory activity of Aloe Vera.

Unlike steroids, Aloe Vera and gibberellin inhibit inflammation but do not retard wound healing. This study helps redefine inflammation as it relates to wound healing.

- Aloe Vera improves wound healing, which suggests that it does not act like an adrenal steroid.
- Aloe Vera improves wound healing in a dose-response fashion, reduces edema and pain, but does not decrease the granuloma tissue around a foreign substance under the skin.

Aloe Saponins



Saponins are natural anti-fungal agents which inhibit the growth of bacteria, viruses and fungi.

They increase the concentration of antibodies in the blood, lower cholesterol and normalize blood sugar concentration. Saponins also increase mineral absorption helping the neutralization process of acidic waste, improving digestion and helping in achieving overall wellness.

Aloe Vera contains saponins. These are soapy substances from the gel that is capable of cleansing and having antiseptic properties. The saponins perform strongly as antimicrobial against bacteria, viruses, fungi, and yeasts.

Saponins when mixed with water reduce the surface tension of water, allowing the formation of small stable bubbles. As a consequence of their surface-active properties, saponins are excellent foaming agents (very stable). Today, Aloe saponins are used in the manufacture of toothpaste, shampoos, liquid soaps, and cosmetics, kitty litter, detergents, beverages, lipsticks, herbal skin balms, and many other things. Ideal to aloe soap non scented or aloe body wash for tattoo washing care.

The properties of Aloe Vera saponification is conducted by the combination of amino acids and polysaccharides that make these accumulations of external fat and become contaminants foamy substances, being removable easily with daily grooming. This deep cleaning promotes exchanges with the outside can also penetrate water containing Aloe Vera this will produce a deep hydration of the Aloe Vera it is not just only a natural moisturizer, but also a powerful astringent that has the ability to thoroughly clean all three layers of the skin, this deep cleaning pores and remove obstruction of glandular ducts, so the substances nutrient and water penetrates easily into the hypodermic layer.

Although it is recommended for all skin types, it is especially recommended for oily or acneic, conserves water ungreased. Another property of Aloe Vera is its high regenerative capacity, this is primarily based on the vitamins (A, B1, B2, B6, and B12) and polysaccharides present in Aloe Vera (glucomannan, pentoxa, hexose, galactose, etc.), which make Aloe a very versatile skin ingredient for your cleaning solutions.

Vitamins C and E

Or ascorbic acid. Vitamin C is required for growth and repair of tissues in all parts of the body. It is necessary to form collagen, an important protein used to make skin, scar tissue, tendons, ligaments and blood vessels. Vitamin C is essential for wound healing and repair and maintenance of cartilage, bones and teeth. It is also one of many antioxidants such as vitamin E and beta-carotene.

Zinc

Zinc helps your immune system, which is your body's system for fighting off illnesses and infections. It also helps with cell growth and helps heal wound. Zinc has a function in wound healing, immune system health. Helps fight infections and speeds healing. Zinc is required for the activity of the enzymes necessary in cell division, cell growth, as in wound healing. Plays an important role in increased infections and skin lesions.

Aloe contains amino acid Leucine

The strongest of the BCAAs, is responsible for the regulation of blood-sugar levels, the growth and repair of tissues in skin, bones and of course skeletal muscle. It's a strong booster to Human Growth Hormone (HGH). It helps in healing wounds, regulating energy, and assists in the preventing the breakdown of muscle tissue.

Aloe Lignins

Aloe Lignins is the responsible that allow Aloe Vera gel to penetrate deep into the tissues of the skin, through all seven layers. This is especially of importance when trying to heal skin conditions Salicylic acid and other antiprostaglandin compounds may be responsible for Aloe's local anti-inflammatory activity, possibly due to an inhibitory effect on the arachidonic acid pathway via cyclooxygenase. Lignin a cellulose-based substance, It has no known medicinal properties but it is this that is thought to enable the Aloe Vera, when applied topically, to penetrate through the human skin to the dermis layer where new skin cells are made. Ideal to use Aloe Vera as vehicle of others active ingredients.



ALOE VERA AND HOW TO USE IT FOR YOUR NEW TATTOO

New tattoos have special needs, and a tattoo that looks good and ages well owes much good skin care in the first few weeks. To heal properly, tattoos should stay dry and clean. They need access to air and enough moisture to stay soft and healthy. Aloe Vera is antibacterial and anti-inflammatory. It relieves pain and itching, and delivers moisture deep beneath the skin's surface, while allowing skin to breathe. Many experts (tattoo artists and tattoo addicts) however, include Aloe on their list of what to avoid in caring for a new tattoo, usually without explanation.

The most-researched use of Aloe Vera is as a topical treatment for damaged tissue. Commonly used to treat burn victims and to promote healing after surgery, Aloe has been proven safe and effective in treating wounds, which tattoos essentially are. However, some tattoo experts are hesitant to recommend Aloe Vera for treatment of new tattoos. The answer might have something to do with what makes tattoos different from ordinary wounds.

In a recently made tattoo, ink is concentrated in the uppermost layers of the skin and superficial damage in the first few weeks can have a long-term effect on its appearance. Some changes are inevitable; the lymphatic system detoxifies the body by flushing foreign matter, including ink, from the skin, resulting in some fading. With age, ink seeps into the lower layers of the skin- tattoos become more resilient and less effected by minor damage at the surface.



What makes Aloe Vera especially effective in treating wounds is its ability to support the growth of new, healthy skin. Aloe contains vitamins and amino acids necessary for new tissue growth and polysaccharides that stimulate the body's immune response and prevent infection. Another part of the equation is Aloe's concentration of enzymes, which slough off dead skin, stimulating new cell production. It might be this characteristic in particular that makes it questionable as a treatment when tattoos are new and ink is concentrated in the upper skin layers.

Skin care continues to be important once a tattoo has fully healed. A tattoo that is moisturized and infection-free ages well. There's no reason why Aloe wouldn't be safe to use on an older tattoo to keep skin healthy. In addition to providing moisture and protecting skin from infection, Aloe can be used to soothe persistent mild irritation which can result when some inks are exposed to sunlight.



Formation of a scab or exudative crust in new tattoo

An exudate can be defined as any fluid that is secreted from the blood vessels and tissues through lesions or inflamed areas of the body. Exudate is a purulent or clear fluid that oozes from wounds on the body. Exudate fluid is generally composed of cells, platelets, proteins, serum, white blood cells, red blood cells, and similar body matter or fluids. The flow of exudate away from the wound may also reduce infection. However, as the exudate dries, a crust is formed that not only depletes the moist wound healing environment but also tears away the adherent exudate from the wound. The removal of the exudative crust commonly results in secondary injury to the wound as well as ink loss in the case of tattoo wounds. The best wound covers keep the wound moist while also absorbing exudates to expedite healing of the wound. A moist wound healing environment accelerates the recovery time and also reduces the amount of scarring on the wounded tissue.

Tattoo parlors may offer a variety of methods to address the immediate aftercare of the wound created by a new tattoo. One of the most common care options usually consists of the application of petroleum-based products to create an occlusive layer over the wound as well as a secondary dressing, which often is not of medical grade quality. Typical secondary dressings used for fresh tattoos are food-grade plastic wrap or gauze. These materials are not suitable to absorb the wound exudate; besides, they may not be the best option to control bleeding or prevent ink loss.



By using a plastic wrap, tattoo artisans may create a seal around the skin, therefore preventing oxygen from permeating the dressing and reaching the wound. This seal also traps blood and exudate right against the skin, creating a favorable environment for bacterial growth and infection, two of the most undesirable side effects of tattoos.

A different method to treat the wound consist on the application of acrylate polymers dissolved in hexamethyldisiloxane or isooctane. These polymers are similar in function to saniderm or Dermabond, and do not need a secondary dressing which makes them a much healthier than the plastic wrap option. However, they are difficult and painful to remove and may remain

affixed to the wound for days, making them an uncomfortable or displeasing option for a fresh tattoo wound.

For a fresh tattoo, the form the formation of a scab or exudative crust is highly undesirable and detrimental to the recently applied tattoo art. Scabs also form a barrier to the generation of new tissue. Skin regenerates much faster and the risk of infection from airborne pathogens is lower with a moist wound. The premature removal of a scab or exudative crust can cause injury to the healing wound as well as potential loss of tattoo pigment, which is highly undesirable after the pain and expense of obtaining the tattoo.

Recently, hydrogels have been used as a dressing for wound care. Hydrogels are comprised of materials that create intermolecular entanglements using water for dispersal. Hydrogels are highly absorbent natural or synthetic polymers, with high water content, that possess a degree of flexibility similar to natural tissue. Due to their high water volume, hydrogels can keep a wound moist yet still absorb exudate. While non-cross linked hydrogels can be spread over a surface with irregular boundaries, the outer surface remains sticky, requiring a secondary dressing to prevent random debris from clinging to the wound covering.

Also, traditional hydrogels are not optimal for a patient who is not immobilized. A mobile patient would quickly displace a traditional hydrogel dressing that was not secured by a secondary dressing since the sticky surface may adhere to outside objects and become displaced. Particles may become attached to the sticky surface or the hydrogel may inadvertently be dislodged from the wounded area if the patient rubs the hydrogel against a surface. Secondary dressings are necessary to prevent these issues and maintain the position of the traditional hydrogel dressing. Alternatively, hydrogels can be cross-linked by radiation, free radicals, or other means to result in a rubbery material that can be cut into various forms but a secondary dressing will still be required to secure the material to the wound and surrounding skin. These rubberized hydrogels are available in strips that may need trimming to accommodate an irregularly shaped wound. In the case of an especially large wound, an impractically high number of strips may be required.



A hydrogel formulated with Aloe Vera can easily improve wound healing of a freshly applied tattoo, while also reducing the formation of exudative crusting and preventing further ink loss. It also absorbs exudate, allows oxygen through, adheres to the moist wound surface and can be removed with little inconveniences for the user.

Another option for small tattoo surfaces could be to apply Aloe Vera and some minerals through a spray solution to create a transparent membrane layer over the skin. This spray may react with the hydrogel, creating a film that is tacky on the inside but non-tacky on the outside, protecting the wound from external contaminants and bacteria while also allowing oxygen and promoting a healthy recovery, eliminating the need of a secondary dressing. It is recommended to formulate alongside ingredients such as sodium alginate to allow for the formation of the film.

EXPERTS AGREE: ALOE REDUCES SCARRING

New tattoos have special needs, and a tattoo that looks good and ages well owes much to good skin care in the first few weeks. To heal properly, it needs access to air and enough moisture to stay soft and healthy. Aloe Vera is antibacterial, reparative, and anti-inflammatory. It relieves pain and itching, and delivers moisture deep beneath the skin's surface, while allowing skin to breathe. Aloe has a long record of external use in treating skin burns, irritations, damaged tissue, and disorders. It is high in vitamins and minerals, and commonly used to treat burn victims and to promote healing after surgery, Aloe has been proven safe and effective in treating wounds, which tattoos essentially are. With age, ink seeps into the lower layers of the skin – tattoos become more resilient and less affected by minor damage at the surface. Skin care continues to be important once a tattoo has fully healed. A tattoo that is moisturized and infection-free ages well. There's reason why Aloe is perfect to use on an older tattoo especially: to keep skin healthy.



In addition to providing moisture and protecting skin from infection, Aloe can be used to soothe persistent mild irritation which can result when some inks are exposed to sunlight.

Aloe is widely recommended as a treatment to reduce tattoo scarring. Scarring can look like raised patches or bumps on the surface, and is often not visible until after the tattoo has fully healed and swelling has subsided. Scarring can result from improper tattooing techniques or complications during the healing process. Using Aloe on scars can reduce their severity as well as the likelihood of infection and further skin damage. With regular use, the surface of the skin will become more even and better prepared for any touch-up work necessary.



These properties work to heal the tattoo scarring with their anti-inflammatory agents that will lessen inflammation and help reduce the scar, the moisturizing benefits will keep the scar well hydrated and the compounds and properties found in the sap of Aloe Vera leaves also have anti-bacterial effects. This is a plus and will help to keep the area from becoming infected and worsening the condition. The combination of all these compounds in the sap, when applied correctly, will eventually level the scar flush with the rest of the skin.

When you get a tattoo, you want to make sure that your artist really knows what he's doing. If he doesn't, you may end up with a scarred tattoo, and scars can last a lifetime. Scarring happens when the tattoo artist digs in too deep with their needle. Sometimes it isn't the artist's fault, however. Scarring can take place on sensitive skin that heals slowly and is more prone to scarring in general.

What does a tattoo scar look like? Generally, you can't tell it's there unless you touch it. It is raised skin tissues wherever the needle went too deep. Sometimes if the scar is bad enough, it can distort the tattoo and the ink.

Typically scarring becomes more noticeable over time. The skin is healing in the early weeks after a tattoo, when itchiness and redness are normal. After a few weeks, however, these signs may indicate that a scar is developing.

The main sign of scarring is raised skin. The skin will vary from slightly raised to larger bumps. Typically, the raised skin will be around the outline of the tattoo but it can also appear be on the overall tattoo.



Apply Aloe Vera when the tattoo becomes itchy

The scarring can be caused by anything, ranging from improper aftercare to sensitive skin. With most tattoos, scarring does not occur, but if the tattoo artists gets too deep with the needle or works the skin too hard, you can suffer scarring. Assuming everything went well with the tattoo, and you are healthy, you should not suffer any scarring. But, if you do, Aloe Vera can minimize the look of a scar from a tattoo.

Apply Aloe moisturizing gel to the itchy skin. Aloe Vera gel may help prevent the appearance of scars by moisturizing the skin and nourishing to allow for proper healing. The gel from the aloe plant contains microbial and anti-inflammatory properties which may help heal the skin and reduce scars. Apply the gel directly to the scarred skin 2 to 3 times a day.

ADD MORE LIFE TO YOUR COSMETIC ANTI-SCARRING PRODUCTS WITH NATURAL BIOACTIVES FROM ALOE VERA

- First: the polysaccharides act as a moisturizer agent and hydrates the skin.
- Second: Aloe is absorbed into the skin and stimulates the fibroblasts to replicate themselves faster. These cells are responsible of producing produce the collagen and elastin fibers, so the skin becomes more elastic and less wrinkled.
- Third: Aloe makes the surface of the skin smoother because of its cohesive effect on the superficial flaking epidermal cells, binding them.

WHAT TO DO WHEN YOU NO LONGER WANT YOUR TATTOO

Up to 50% of those who get tattoos may regret those decisions and may want to have their tattoos removed completely or faded enough to allow for a new design to cover up the previous tattoo. Currently, the options available are not entirely reliable, consistent or affordable, but science is advancing on this area. Specifically, laser based therapies are becoming the standard treatment and have shown promise in very specific types of tattoos –depending on the pigment type, size, and the patient’s skin color—, but there have shortcomings that may prevent patients from seeking this type of treatment.

Some of the drawbacks of laser-based therapies include: affordability, availability, reliability, consistency, associated pain and discomfort, hypo- or hyper-pigmentation of the skin, and scarring. Other commonly accepted treatment modalities for tattoo removal include dermo- abrasion and surgical removal which may further increase the risk of adverse side effects and potential irreversible markings left in the removal process.

The tattoo removal market is currently valued at \$66 million per year, and with the increased popularity of tattoos among the young generations, a steady growth is expected for this market in the years and even decades to come.



The cost for removing a tattoo is far greater than the original cost of the tattoo.

Tattoo removal depends upon several factors including size of the tattoo, location of the tattoo, the individual’s healing process, how the tattoo was applied and the length of time it has been on the skin. Tattoos naturally fade over time due to sun exposure and the ongoing immune response to foreign bodies (i.e. ink pigment particles). Laser-based therapies use high-energy light emissions at specific wavelengths to, in essence, accelerate and enhance specificity of the natural decomposition of tattoo ink by sun exposure.

As tattoo inks vary in color and consequently, absorption wavelengths, lasers with different emission wavelengths are necessary to remove specific pigments, essentially requiring advanced and expensive laser treatments with sophisticated lasers that can emit several wavelengths. The high energy light decomposes the ink residing in residual bodies, allowing the natural immune response to continue.

In addition to the more prevalent body tattoos, cosmetic tattoos or ‘permanent make-up’ are also skin modifications that many try to remove with laser, dermabrasion and surgical treatments.

As healing proceeds, the damaged epidermis flakes away (eliminating surface pigment) while granulation tissue forms deeper in the skin, which is later converted to connective tissue by collagen growth. This mends the upper dermis, where pigment remains trapped within fibroblasts, ultimately concentrating in a layer just below the dermis/epidermis boundary. Its presence there is stable, but in the long term (decades) the pigment tends to migrate deeper into the dermis, accounting for the degraded detail of old tattoos.

The benefits of Aloe Vera gel are highly desirable for these types of treatment. A soothing gel with Aloe Vera may relieve most of the inconveniences of the light-based therapies such as skin irritation, discoloring and sensitivity. Also, Aloe Vera may be formulated with other active ingredients to further stimulate the natural response of the body, allowing for a faster pigment elimination by the skin cells.



Boost your Tattoo Care products with Aloe Vera

Aloe Vera has been used for centuries to help treat a variety of skin conditions, and many people have had great success at reducing the appearance of scars by rubbing parts of the Aloe Vera plant over them throughout the course of a few months. While cutting, squeezing and rubbing a section of Aloe Vera plant over a tattoo scar can definitely help settle the area and improve scar appearance, an Aloe Vera gel product especially formulated for scar prevention is way more convenient and an excellent business opportunity.

Aloe Vera Gel is a versatile raw natural ingredient perfect to incorporate in your product portfolio for Tattoo Care. Aloe Vera removes the obstruction of the pores by foreign substances in the skin. Surprise your clients by including Aloe Vera into your cosmetic and beauty care product lines you carry. The cosmetics industry often uses it as an emollient and moisturizer in a myriad of products such as moisturizers, face and hand creams, cleansers, soaps, suntan lotions, shaving preparations and baby lotions. Aloe is rich in mucilaginous polysaccharides including acemannan (one of the active metabolites of Aloe); wound healing, stimulates fibroblast growth, angiogenesis, and re-epithelialization; reduces inflammation and increases collagen synthesis.

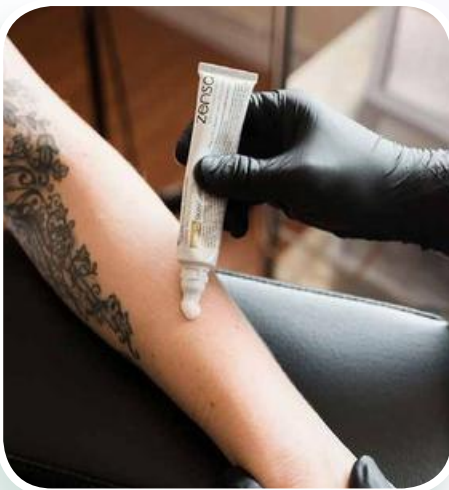


Aloe Vera can help to enhance skin health

Aloe is one of the most widely-used ingredients in high-grade skin care products.

There's a reason for that: its great medicine for the skin. Aloe soothes the skin, hydrates it, nourishes it and accelerates the regeneration of new skin tissue. And while most people are only familiar with using Aloe Vera externally, Aloe also enhances skin health when used internally.

The bio-active properties of the Aloe Vera are therapeutic as well and the plant has a long established reputation in the world. The plant is well-known for its trans-dermal properties. It can reach deeper body tissues, allowing it to take all the nutrients of the Aloe into the skin. Inflammatory type of skin problems such as eczema, psoriasis can benefit from these high transdermal and anti-inflammatory properties. Further results have shown glycol-nutrients act as humectants— substances that absorb or help another substance retain water and moisture. Aloe helps retain moisture in damaged tissue; the penetrating power of Aloe allows water and other moisturizers to sink deeply into the skin, replenishing lost fluids and restoring the fatty layer. Aloe Vera allows uronic acids (which strip toxic materials of their harmful effects) to penetrate deeply, making the cleansing astringent qualities of Aloe more effective.



Mechanism of actions of Aloe Vera in body care

Healing properties: Glucomannan, a mannose-rich polysaccharide, and gibberellin, a growth hormone, interacts with growth factor receptors on the fibroblast, thereby stimulating its activity and proliferation, which in turn significantly increases collagen synthesis after topical and oral Aloe Vera. Aloe gel not only increased collagen content of the wound but also changed collagen composition (more type III) and increased the degree of collagen cross linking. Due to this, it accelerated wound contraction and increased the breaking strength of resulting scar tissue. An increased synthesis of hyaluronic acid and dermatan sulfate in the granulation tissue of a healing wound following oral or topical treatment has been reported.

Anti-inflammatory action: Aloe Vera inhibits the cyclooxygenase pathway and reduces prostaglandin E2 production from arachidonic acid. Recently, the novel anti-inflammatory compound called C-glucosyl chromone was isolated from gel extracts.



Moisturizing effect: Mucopolysaccharides help in binding moisture into the skin. Aloe stimulates fibroblast which produces the collagen and elastin fibers making the skin more elastic and less wrinkled. It also has cohesive effects on the superficial flaking epidermal cells by sticking them together, which softens the skin. Its moisturizing effects has also been studied in treatment of dry skin associated with occupational exposure where Aloe Vera gel gloves improved the skin integrity, decreases appearance of fine wrinkle and decreases erythema.

Antiseptic effect: Aloe Vera contains 6 antiseptic agents: Lupeol, salicylic acid, urea nitrogen, cinnamonic acid, phenols and sulfur. They all have inhibitory action on fungi, bacteria and viruses. The Aloe Vera a plant produces six antiseptic agents: Lupeol, a natural salicylic acid, urea nitrogen, cinnamic acid, phenol, and sulfur all demonstrate anti-microbial effects. Lupeol and salicylic acid also have analgesic effects. These naturally occurring sterols bear a tremendous similarity to synthetic materials, those synthetic materials like corticosterone and hydrocortisone, traditionally used in allopathic medicine for their anti-inflammatory effects and particularly for skin eruptions, eczema and other pruritic and erythemic conditions.



The antiseptic property of Aloe Vera is due to presence of six antiseptic agents namely lupeol, salicylic acid, urea nitrogen, cinnamonic acid, phenols and sulphur. These compounds have inhibitory action on fungi, bacteria and viruses. Though most of these uses are interesting controlled trials are essential to determine its effectiveness in all diseases.

It treats sunburn: Aloe Vera helps with sunburn through its powerful healing activity at the epithelial level of the skin, a layer of cells that cover the body. It acts as a protective layer on the skin and helps replenish its moisture. Because of its nutritional qualities and antioxidant properties, the skin heals quicker.

- It has six antiseptic agents which kill bacteria, viruses and fungus.
- It acts to regenerate damaged tissues.
- It is a natural moisturizer.
- It stops itching and burning.

The anti-inflammatory activity of Aloe compounds has been extensively investigated. Studies have shown that Aloe not only reduces inflammation, but also improves wound healing. The anti-inflammatory/ wound healing ability of Aloe has been attributed to a growth factor-like substance that activates the wound healing and inflammation reduction processes.

Its healing property is related to a compound that is called glucomannan, which is enriched with polysaccharides like mannose. the glucomannan affects fibroblast growth factor and stimulates the activity and proliferation of these cells and in turn improves collagen production and secretion. the mucilage of aloe vera not only increases amount of collagen on wound site, but also increases transversal connections among these bands rather than creation of change in collagen structure and as a result accelerates wound improvement.



ALOE VERA IN TATTOO MARKET

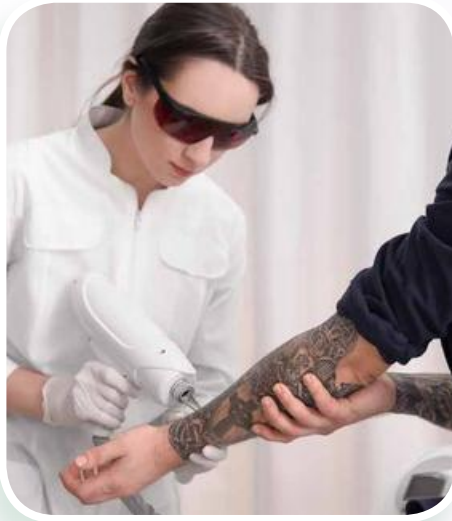
After the tattoo creation, the inflammatory responses and collagen rising production start in the cells of the inked area, followed by a rearrangement of epithelial tissue. This is a physiological process and many factors may intervene in it including growth factors and cytokines in quality of its trend. The tattoo healing is aimed at the minimum possible time and with least amount of pain and ache and scar for the tattoo's customer.

Tattoo after care is similar to treating a wound after dermal injury. This healing may be an imperfect process, which could lead to the formation of scars as the skin re-establishes its integrity. These scars may have different characteristics to normal skin, ranging from fine-line asymptomatic scars to problematic scarring including hypertrophic and keloid scars. Scars appear as a different color to the surrounding skin and can be flat, stretched, depressed or raised, manifesting a range of symptoms including inflammation, erythema, dryness and pruritus, which can result in significant psychosocial impact on patients and their quality of life.

Aloe Vera penetrates the skin quickly and deeply. This allows water and other moisturizers to sink deeply into the skin, restoring lost fluids and replacing the fatty layer. It permits the uronic acids, which strip toxic materials of their harmful effects, to penetrate deeply and allows the cleansing astringent qualities of the gel to work better. By increasing the circulation of the blood to an area, Aloe Vera sloughs off the dead cells and fosters the growth of new ones. This helps foster the regeneration of scarred or blemished skin tissue and provides a protective coating on the skin to prevent the growth of harmful bacteria, it heals blemishes with little or no scarring. The moisturizing effect of Aloe Vera can be explained because of three main attributes.

Taken that these polysaccharides also have antihistamine and antibiotic properties, people with damaged or easily-irritated skin are benefited. Finally, the enhanced availability of fibroblasts supports the natural collagen production process. Most global markets are increasingly concerned with consumer health and the use of natural products. Aloe Vera should regain its position of valuable active ingredient now we are able to better understand the plant and know to look for the active compounds.

Some attributes and product Positioning formulated with Aloe Vera for tattoo care products



- Aloe soothes dry skin and relieves the sunburn in tattoo areas
- Soothes and softens the skin after the tattoo application
- Feels great when applied on tattooed skin
- Aloe soothes red, sore or irritated skin areas
- Provides protection as a moisture barrier
- Hydrates and smoothes skin
- Retains moisture, smoothes away surface dryness and protects tattoo from peeling and scarring
- Repairs flaky/dry skin in a recently tattooed area
- Aloe instantly relieves dry, cracked, itchy skin and heals since the very first time you use it
- Aloe Vera gel moisturizers effectively penetrates through layers of tattooed skin
- Aloe keeps the skin moisturized. Moisturizing the tattooed area stops scabs from forming and seals lacerations to keep bacteria from spreading.
- Aloe relieves irritation: New ink can make skin more sensitive, therefore a salve helps reduce itchiness, rashes, and other skin-irritant conditions.
- Preserves skin's vibrancy
- Balances the natural moisture of the skin
- Aloe replenishes, restores, and softens sun-drenched skin to its natural moisture balance.
- Aloe is a natural skin conditioner, this helps moisturize even the driest skin, leaving it soft, smooth, and healthy looking

Tattoo care and skin preparations

Aloe Cleansing Soap bar or shower body wash for Tattoos. Aloe contains natural saponins, promoting a gentle cleaning. The cleaning of a recently tattooed area is a very sensitive but important activity. Include an Aloe Soap in your Tattoo Care portfolio to promote a healthy, beautiful tattoo. Aloe leaves the skin feeling clean, smooth, and silky while minimizing the irritations experienced. It is not advisable to formulate this kind of product with any fragrance to avoid allergic reactions.



Aloe Antibacterial Foam. Besides washing the tattooed area daily with aloe non scented soap, it is recommended to wash the wounded area of tattoo several times to keep clean and moist and prevent the formation of an exudative crust.

Formulate a skin soothing formula for soothing minor skin irritations. Formulated with a base of stabilized Aloe Vera Gel, increases the natural skin-soothing and cleansing properties of the Aloe Vera Gel. Aloe provides a naturally soothing, pH-balanced spray that is easy to apply to even sensitive skin. Use Aloe in your formulations to develop an Aloe that soothes the skin after minor wounds, cuts, scrapes, burns, and sunburn. Use a mild moisturizer on newly tattooed skin throughout the day to provide relief to irritation and itch. Aloe-Vera Gel (alcohol free) can be formulated to create an ointment cream to massage into the site up to four times each day to promote healing and prevent ink loss. Application of Aloe ointment cream can begin as soon as the dressing is removed or the skin has healed. Mix aloe gel with silicone gel to fade scars, prevent scars and prevent hyperpigmentation. Keep dressings over the treated area. The bottom line is to moisturize the area between sessions, and take care of yourself to promote healing and prevent scarring.



Aloe moisturizing gel. Aloe gel helps lubricate sensitive tissue without promoting infection. It can be especially formulated for topical applications that are intended to moisturize, soothe and rehydrate the skin. Aloe Vera is easily absorbed by all kinds of skin, while soothing irritations without staining the clothes.

Other Aloe products for Tattoo after care for dry, chafed, wind-blown, or weathered skin. Formulate Aloe Vera alongside herbal oils such as Jojoba Oil and active ingredients like vitamin E to improve moisturizing and promote a soothing sensation. Collagen and Elastin are ingredients that can be formulated to assist in keeping the skin smooth and supple.

Aloe sunscreen SPF after care tattoo. When a tattoo is fully healed, it is important to avoid prolonged sun exposure. It is good to always keep the tattooed skin away from UV radiation in order to keep the color from fading. And with today's knowledge of the dangers of over-exposure to the sun, Aloe sunscreen SPF after care tattoo can provide care of the color of tattoo. Create sun care products with Natural Aloe ingredients, aloe is effective to help soothe, lubricate, moisturize, and protect the skin against sun damage. Aloe Vera gel provides a silky and smooth sensation, Aloe has natural moisturizers and humectants compound as polysaccharides and maintains the skin's natural moisture balance. Avoid sun exposure to the treatment site; mix aloe with zinc and other ingredients that soothe and completely protect the skin, even from sunlight. A thick layer, like icing on a cake, applied before going outdoors will protect the site for many hours, even if you go swimming. Always remember to re-apply additional product to maintain a nice layer of protection. Again, you choose. But always choose a sunblock, not a sunscreen. Sunscreens do not give you the protection that you need, they usually contain chemicals that can irritate the treated area and delay healing. Sunblock's contain zinc oxide as the main ingredient. Zinc oxide will physically block the UV rays from the treated site.



Inked Tattoo healing gel, ideal to promote faster healing with Micro-Nutrients through skin absorption, Aloe has anti-bacterial properties, helps to minimize chance of infection, create a serum to apply directly tattoo area, for Both Micro-Pigmentation and permanent make-Up, enhances the color, clarity and brightness of new & Old Tattoos
Aloe has an antiseptic, anti-inflammatory properties which soothe and relieve painful itching, swelling & scab formation, promotes faster healing by creating a protective shield decreasing scab formation and color gaps, stimulates micro-circulation to promote healing, helps set ink, add to your aloe serum Vitamins A and C

Aloe tattoo ointment after tattoo process. Ideal for after washing the tattoo, develop an aloe ointment with bacitracin and vitamin A+D and create an excellent ointment and aloe moisturizing cream, lubricates and moisturizes, add aloe vera gel to vegan replacement for petroleum-based products, there are a market opportunity to formulate a aftercare tattoo products to avoid and prevent the new tattoo gets messed up during the healing period, it is recommended follow good aftercare procedures. One important part of aftercare, is keep freshly inked skin moisturized and protected. Aloe Tattoo ointment

is a skin protectant ointment that is made from petroleum jelly, which has been used for decades to heal skin issues. It works to hydrate severely dry skin and soothe skin that is irritated for various reasons. Is important to add additional ingredients that add to its moisturizing properties as mineral oil and ceresin in this ointment add even more protection for your skin and tattoo. This product is ideal to speeding up the healing process of a new tattoo and making sure that the tattoo design or color doesn't get messed up from irritated skin, excess scabbing, or rashes. Aloe tattoo ointment is capable to heals the tattoo and accelerated rate while ensuring the tattooed area of skin retains moisture and nourishment.

Create or renew your line of products by applying aloe vera to your formulations for tattooed skin care - Tattoo cream (Color protection)

- Foam for cleaning tattoos
- Body restorer skin gel
- Biphasic tattoo lotion
- Makeup covers tattoos

AMB WELLNESS, YOUR PREMIUM ALOE VERA SUPPLIER

Ask for any range of polysaccharides or acemannan, we can fit your valuable needs and specifications. AMB wellness improves your functional marketing value, imparts, and gives a benefit in food products. AMB's exclusive Aloe premium ingredients demonstrates superior quality as well as having the quality of retaining the highest percentage of the beneficial compounds of Aloe compared with freeze dried so you can benefit from all its bioactive ingredients that makes Innovaloe premium,



one of the favorites around the world. AMB wellness has developed the most potent soluble Aloe Vera powder in the industry. All of AMB Wellness's Aloe Vera Raw Materials adhere to the following international Standards:

- Organic Certified by ECOCERT according to EU & NOP USDA regulations.
- Halal Certified by IFANCA
- Kosher Certified by Earth Kosher, all of our aloe meets the dietary requirements of Jewish Law.
- Products and Facility Certified by the International Aloe Science Council, a non-profit organization that subject's aloe facilities and products to a series of rigorous quality and purity tests. Our ingredients proudly bear the IASC seal, which means you are getting the purest, most beneficial aloe possible.

Our powder extracts are 100% water soluble and do not contain any carrier, our Aloe Vera products make the ideal base for functional beverages, nutraceutical formulations as well as for inner beauty cosmeceuticals applications. AMB Wellness pays careful attention to growing, harvesting, and manufacturing our certified organic Aloe Vera Raw Materials. From seed to finished product, we are dedicated to purity and quality every step of the way.

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WHY AMB WELLNESS?

Our plants are organically grown in the dry climate of Northeast Mexico, with plenty of sun and carefully timed irrigation. The plants are harvested by hand in order to select only the highest quality tree-year-old Aloe leaves, which scientific investigation has found have the highest antioxidant potential. Experienced quality control personnel monitor each step of the production process. Extensive microbiological and purity testing ensures an ingredient you can trust to wear your brand name.

At AMB Wellness, we see you as more than just a customer. We see you as a partner in health, just as you are dedicated to bringing the most efficacious finished products to market, AMB Wellness is dedicated to providing you with the finest materials to accomplish that goal. When you work with us, you will benefit from our:

Commitment to Quality: From the field to the factory, we are committed to quality every step of the way. You will get quality and purity certification with each order.

Cutting Edge R&D Team: Our team of researches is constantly working to develop new advances that give you a formulating edge.

Outstanding Customer Service: We are there when you need us, with friendly service and on-time delivery.

Year-round Supply: We grow our own Aloe Vera, so we have total control over the supply. That means you will never be left out in the cold.

